DOCUMENT RESUME

ED 232 780 PS 013 782

AUTHOR Telleen, Sharon; And Others
TITLE Observation Manual for Assessing Social Interaction between Preschool Aged Children and Their Caregivers.
PUB DATE Aug 81
NOTE 22p.
PUB TYPE Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Child Caregivers; *Classroom Observation Techniques; Guidelines; *Interaction Process Analysis; *Parents; *Preschool Children; Preschool Education; *Preschool Teachers
IDENTIFIERS Category Observation Systems; Naturalistic Observation; *Social Interaction

ABSTRACT

The observation manual provides a system for the naturalistic observation of interactions between the preschool child and the caregiver. It can be used in research with the preschool aged child and the parent or teacher in home, laboratory, or school settings. The behavior categories included are applicable for collecting frequency data or sequential patterns of behavior and are appropriate for a study of reciprocal social interactions. The categories for observation of social interaction include context codes, child behaviors and caretaker behaviors. The context codes describe the play setting and the physical proximity of individuals in the interaction. The child behaviors categories include actions upon objects, physical movement, facial expressions, direction of gaze, and verbal and non-verbal communication. The caregiver behaviors include teaching behaviors, direction of physical movement, direction of gaze, facial expressions, and verbal and nonverbal communication. These categories of behavior are useful in a sequential analysis of data. A set of categories can be selected that are mutually exclusive and exhaustive. Using the mutually exclusive and exhaustive categories, behaviors of the child and the caregiver can be recorded simultaneously to provide data on patterns of behavior. Data on the sequence of the behaviors is obtained by recording the observed order of the occurrence of specified behavior patterns in units of time. (Author/RH)

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PS 013782

OBSERVATION MANUAL FOR ASSESSING SOCIAL INTERACTION BETWEEN PRESCHOOL AGED CHILDREN AND THEIR CAREGIVERS

August, 1981

Sharon Telleen, Ph.D.'
Institute for Child Study
University of Maryland
College Park, Maryland 20742

Carl Dunst, Ph.D.
Western Carolina Center
Morgantown, North Carolina 28655

Richard Lee, Ph.D.
University of Wisconsin--Whitewater
Whitewater, Wisconsin 53190

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ABSTRACT

The observation manual provides a system for the naturalistic observation of the interactions between preschool child and caregiver. It can be used in research with the preschool aged child and parent or teacher in home, laboratory or school settings. The behavior categories included are applicable for collecting frequency data or sequential patterns of behavior and are appropriate for a study of reciprocal social interactions.

The categories for observation of social interaction include context codes, child behaviors and caretaker behaviors. The context codes describe the play setting and the physical proximity of individuals in the interaction. The child behaviors are categories of actions upon objects, physical movement, facial expressions, direction of gaze, and verbal and non-verbal communication. The caregiver behaviors include teaching behaviors, direction of physical movement, direction of gaze, facial expressions, verbal and non-verbal communication.

These categories of behavior are useful in a sequential analysis of data. A set of categories can be selected that are mutually exclusive and exhaustive. Using the mutually exclusive and exhaustive categories, behaviors of child and caregiver can be recorded simultaneously to provide data on patterns of behavior. Data on the sequence of the behaviors is obtained by recording the observed order of the occurrence of specified behavior patterns in units of time.

INTRODUCTION

This observation manual provides a system for the naturalistic observation of the interactions between the preschool child and the caregiver. The categories are applicable for collecting frequency data or sequential patterns of behavior and are useful in the study of reciprocal social interactions.

The categories include context codes, child behavior and caretaker behaviors. The context codes describe the play setting and the physical proximity of individuals in the interaction. The child behaviors are categories of actions upon objects, physical movement, facial expressions, direction of gaze, and verbal and non-verbal communication. The caregiver behaviors include teaching behaviors, direction of physical movement, direction of gaze, facial expressions, verbal and non-verbal communication.

These categories are useful in a sequential analysis of data. From the manual a set of categories can be selected that are mutually exclusive and exhaustive. Using the mutually exclusive and exhaustive categories, behaviors of child and caregiver can be recorded simultaneously to provide data on patterns of behavior. Data on the sequence of the behaviors is obtained by recording the observed order of the occurrence of specified behavior patterns in units of time.

The observation manual can be used in research with the preschool-aged child and parent of teacher in home, laboratory or school settings.

Table 1

Behavior Categories for Assessing Social Interaction

CONTEXT CODES

Play

NP	No Play
WA	Watching
WAT	Watching Caregiver
WAC	Watching Child
IS	Isolate
FP	Functional Play
CN	Constructive
DR	Dramatic
PP	Parallel
FP	Functional Play
CN	Constructive
DR	Dramatic
CV	Cooperative
FP	Functional Play
SAI	Shares - Initiates
SAR	Shares - Responds
AS	Assists
CN	Constructive
DR	Dramatic
GWR	Games with Rules
PO	Play Organizer
RT	Rough and Tumble Play

Physical Proximity

C	Within arms reach of another child/caregiver
I	3-6 feet from another child/caregiver
D	Beyond 6 feet from another child/caregiver
O	Out of camera range
EOO	End of Observation

CHILD BEHAVIORS

Object Actions

HO	Hold Object
POB	Put Object
CO	Carry Object
AO	Activates Object
TH	Throws Object
DRO	Drops Object
PS	Pushes Object
PO	Pulls Object
SL	Slides Object
EX	Examining
SK	Shakes Object
SQ	Squeezes Object
PT	Pats Object
BG	Bangs Object
HOL	Holds Object
MO	Mouths Object
TO	Touches Object
HA	Holds Object - Looks Away

Physical Actions

WTO	Walks to Object
WTC	Walks to Child
WTT	Walks to Caregiver
WFO	Walks from Object
WFC	Walks from Child
WFT	Walks from Caregiver
BP	Body Push
AP	Arm Push
SW	Swipe
HT	Hit
KK	Kick
PA	Pats
HV	Hugs
CR	Crawls
CL	Climbs
RN	Runs
FW	Follows
FL	Falls

Facial Expressions

GM	Grimace
PT	Pout/Frown
SM	Smile
LH	Laugh
NE	No Expression

Gaze

LC	Looks at Child
LT	Looks at Caregiver
OO	Other Object Look
LB	Looks Back and Forth
LA	Looks Away
LR	Looks in Response
NL	No Looking Behaviors

Non-Verbal Communication

RA	Requests Attention
RP	Requests Participation
CP	Communicative Pointing
SH	Shows Object
HD	Hands Object
GO	Gives Object
PL	Pulls Other
TK	Takes Object
TG	Tugs at Object
RQ	Requests Object
GR	Grabs Object
NO	Shakes Head No
SY	Shakes Head Yes
PC	Pushes Child Away
PR	Protest
SO	Showing Off
IMO	Imitate With Object
IMG	Imitate With Gesture
TT	Touches Caregiver
TC	Touches Child

Verbal Communication

VT	Vocalizes to Caregiver
VC	Vocalizes to Child
VRT	Vocalizes in Response to Caregiver
VRC	Vocalizes in Response to Child
OV	Other Vocalization
NV	No Vocalization
CM	Command
QU	Question
ST	Statement
BR	Behavior Requests
IMS	Informational Mutual Statements
MU	Mutual Utterances
IR	Informational Requests
NU	Nonmutual Utterances

CAREGIVER BEHAVIORS

Teaches

CD	Control Directed
IE	Initiated-Elicited
SH	Shared
EL	Elaborative
AS	Assisted
RP	Responsive Phasing
NT	No Teaching

Physical Actions

WTO	Walks to Object
WTC	Walks to Child
WFO	Walks from Object
WFC	Walks from Child

Facial Expressions

GM	Grimace
PU	Pout/Frown
SM	Smile
LH	Laugh
LC	Looks at Child
LR	Looks in Response

Non-Verbal Communication

TC	Touches Child
NO	Shakes Head No
SY	Shakes Head Yes
GO	Gives Object
RQ	Requests Object
CP	Communicative Pointing
TK	Takes Object
HD	Hands Object

Verbal

PS	Praise
SC	Scold
CM	Command
QU	Question
ST	Statement
VC	Vocalize to Child
LC	Looks at Child
VL	Vocalizes/Looks
NV	No Vocalization
VRC	Vocalizes in Response to Child
VRL	Vocalizes/Looks in Response to Child

1. Play

NP No Play
WA Watching
WAT Watching Caregiver
WAC Watching Child

IS Isolate

FP Functional Play
CN Constructive
DR Dramatic

PP Parallel

FP Functional Play
CN Constructive
DR Dramatic

CV Cooperative

FP Functional Play
SAI Shares - Initiates
SAR Shares - Responds
AS Assists
CN Constructive
DR Dramatic
GWR Games with Rules
PO Play Organizer
RT Rough and Tumble Play

WA Watching. "Target child" is watching anything that happens to be of momentary interest. Transition states and general "milling about" are not recorded. Staring or glancing around the room or play area are examples of this behavior. (From Parten & Newhall, 1943; used in Tremblay, et al, unpublished manuscript, p. 3).

IS Isolate. Target child plays alone and independently with toys that are different from those of children who happen to be nearby. He makes no effort to interact with other children. His interest is centered upon his own activity (from Parten & Newhall, 1943. Used in Tremblay, et al, unpublished manuscript, p. 3).

PP Parallel Play. Subject is engaged in an activity with another child in which their staying together can be attributed primarily to the reinforcing properties of the play material. (Bijou, et al., 1969).

A. An activity taking place in a predetermined location. For example: easel painting, swings, trees, tunnels, doll corner, or sand box.

B. An activity involving identical or related material, in which the subject and another child are playing relatively independently of one another.

For example:

1. Subject and another child are digging with separate shovels in the same general location.

2. Subject and another child are building separate block structures in the same general location.

C. Children's attention around focal objects, e.g., thermometer, pets. This is usually teacher directed.

Examples of Parallel Play

1. Two children playing in doll-kitchen area; both dressing dolls, but no interaction or sharing between the two.

2. Playing at the table with shaving cream, paints, markers, etc., but making no attempt to work with another child's materials.

3. Two children helping a teacher prepare snacks.

4. Children listening to record-player with individual sets of earphones.

5. Playing with separate toys at the water table.

6. Two children looking at fish in the aquarium.

7. Children playing in truck area with separate toys.

CV Cooperative Play. Subject and another child engaged in a "shared play" activity, in which reinforcement is derived largely from the mutual use of materials or from the presence of the other child. (Bijou, et al., 1969).

A. An activity involving a common object.

1. Any movable item (single toy, rope) or items children adding to the same structure.

2. A particular part of a nonmovable item which is the direct object of play for both subjects (children filling the same hole; jumping on a board together.)

B. An activity involving an exchange of objects (children throwing leaves at each other; one child hands a rolling pin to another.)

C. A cooperative activity, for example children teeter-tottering; children pulling one another in a wagon.

D. A unified or organized activity. For example, cowboys or parade.

E. A sustained physical encounter. For example, wrestling.

F. A shared play activity identified such as through verbal agreement between two or more children. For example: "Let's build a house." "Okay." Children begin building a house.

Examples of Cooperative Play

1. Two children loading cars into toy "car carrier."
2. Child pouring water into another child's bottle at water table.
3. Children working together on one puzzle.
4. Two girls dressing dolls. Girls verbalize about a "trip" or "vacation" they are going to take.
5. One child invites another to "play house." One says "I'll be the mother." They begin playing.
6. One child hands paper money to another.
7. Two children chase bunny (or another child) around the room.
8. Children sit in cardboard playhouse (in 3-year-old class) or build fortress of blocks and sit in it together.

FP Functional. Simple repetitive muscle movement with or without objects. (From Smilansky, 1968; Rubin, et al., 1976) Examples: Usually coded with object actions. Includes playing with an object (e.g. sliding a truck back and forth and washing a rubber doll in dishpan.)

CN Constructive. Manipulation of objects to construct something (e.g. painting, block building). (From Smilansky, 1968; Rubin, et al., 1976).

DR Dramatic. Substitution of an imaginary situation to satisfy the child's personal wishes and needs. (From Smilansky, 1968; Rubin, et al., 1976) For example: housekeeping, parade, making a row of chairs into a bus.

GWR Games with rules. The acceptance of pre-arranged rules and the adjustment to these rules. (From Smilansky, 1968; Rubin, et al., 1976).

PO Play organizer. The target child specifies an activity, role or other play for peers and/or maintains such ongoing activity (e.g. "Let's play house." From Tremblay, et al, (in press).

RT Rough and tumble play. The target child's behavior includes topographically aggressive behavior accompanied by positive effect from both participants. (Tremblay, et al., in press).

SAI Shares-initiates. The target child initiates by offering or exchanging an object with a peer during play or both cooperate in the use of one object or toy. (Tremblay, et al., in press). May code with Gives Object (GO).

SAR Shares-responds. The child responds to an offer or an exchange of objects with a peer during play or in cooperation in the use of one object or toy. (Tremblay, et al., in press). May code with Takes Object (TK).

AS Assists. The target child provides help to another child. This includes pulling another child up from the floor, boosting or supporting a peer. (Tremblay, et al., in press). May code with Touches Child (TC).

2. Physical Proximity

C Within arm's reach of the other child/caregiver
I 3-6 feet from the other child/caregiver
D Beyond 6 feet distance from the other child/caregiver
O Walk out of camera range
EOO End of Observation

3. Object Actions

HO Hold Object
POB Put Object
CO Carry Object
AO Activates Object
TH Throws Object
DRO Drops Object
PS Pushes Object
PO Pulls Object
SL Slides Object
EX Examining
SK Shakes Object
SQ Squeezes Object
PT Pats Object
BG Bangs Object
HOL Holds Object
MO Mouths Object
TO Touches Object
HA Holds Object - Looks Away

3. Object Actions

HO Hold Object. The child is standing still with an object clasped to its chest or in one or both hands during play. (Ray, 1974).

POB Put Object. The child extends its arm with an object in the hand, and places the object in some specific position. (Ray, 1974).

CO Carry Object. Objects are carried by the child and usually are clasped to the chest. (Ray, 1974).

AO Activates Object. Child attempts to or succeeds in finding a way to activate a toy having a wind-up mechanism or other toy requiring a specific action (e.g., blowing a whistle).

TH Throws Object. An object is forcefully propelled forward or downward.

DR Drops Object. An object is allowed to fall from the hand without any propulsion.

PS Pushes Object. An object which is held is pushed away from the child.

PO Pulls Object. An object which is grasped is pulled toward the child, or an object which is held is grasped and pulled-on as if to remove a part.

SL Slides Object. An object is slid back-and-forth, usually across the midline, on the floor or other surface.

EX Examining. An object is held and rotated, and visually inspected in an exploratory manner.

SK Shakes Object. An object is shaken up-and-down or back-and-forth in a repetitious manner.

SQ Squeezes Object. An object (e.g., a ball or balloon) is squeezed with the fingers, opening-and-closing the hands repeatedly.

PT Pats Object. An object is repeatedly patted with an up-and-down motion, but without any attempt to grasp it.

BG Bangs Object. An object, when held, is struck repeatedly against the floor or other surface.

HOL Holds Object-Looks At. An object held by the hand, is looked at but is not actively played with (i.e., manipulated in any manner).

MO Mouths Object. The hand is placed on an object, but the fingers are not holding it nor is the child performing any manipulative actions on the object.

HA Holds Object-Looks Away. An object is held but is neither looked at nor actively played with.

4. Physical Actions

WTO	Walks to Object
WTC	Walks to Child
WTT	Walks to Caregiver
WFO	Walks from Object
WFC	Walks from Child
WFT	Walks from Caregiver
BP	Body Push
AP	Arm Push
SW	Swipe
HT	Hit
KK	Kick
PA	Pats
HV	Hug
CR	Crawl
CL	Climbs
RN	Runs
FW	Follows
FL	Falls

4. Physical Actions

WTO Walks to Object. Individual walks directly to object.

WTC Walks to Child. Individual walks directly to child.

WTT Walks to Caregiver. Child walks directly to caregiver.

WFO Walks from Object. Individual walks directly from the object involved with.

WFC Walks from Child. Individual walks directly from a child.

WFT Walks from Caregiver. Child walks directly from the caregiver.

BP Body Push. Trunk is forcefully pushed into contact with another person. This pattern looks like pushing except that the arms exert no force and are held away. (Ray, 1974).

AP Arm Push. The arm is extended from the body and is forcefully pushed into contact with another person.

SW Swipe. The arm swings out horizontally and will hit anything that happens to be in the path of movement.

HT Hit. An overarm blow with the palm side of the tightly clenched fist. The arm is sharply bent at the elbow and raised to a vertical position, then brought down with great force on the opponent, hitting any part of him that gets in the way.

KK Kick. The child flexes one leg and swings it forward so that the foot makes an impact on an object or person-usually the leg. If the child is sitting or raised off the ground, both legs may kick simultaneously. (Ray, 1974).

PA Pats. The flat hand is gently tapped once or more on some part of the other person, usually on the upper part of the body. (Ray, 1974).

HV Hug. The arms move horizontally toward an object or person, around, and finally encircling. The movement is usually directed toward a peer's trunk or toward the adult's upper leg. (Ray, 1974).

CR Crawl. The body moves quadrupedally, usually forward, ventral surface off ground. Palms, forearms, knees and toes may touch ground in varying combinations. (McGrew, 1972).

CL Climbs. The slide is the object most often climbed in the classroom. The child places its hands on a rung, grips firmly, and then places both feet on a rung below, or just one foot; then the hands are placed on a higher rung; climbing up, the hands pull the body up and the legs push. The child may also climb on to chairs and tables. (Ray, 1974).

RN Runs. The child moves forward rapidly, using the legs alternately, both off the ground simultaneously, and the body is usually tilted slightly forward. (Ray, 1974).

FW Follows. The child walks or runs toward a person who is moving away from it. (Ray, 1974).

FL Falls. The child is usually performing some locomotory action, the body pitches forward or backwards suddenly, out of the child's control, and some part of the body hits the floor with a force which may cause injury, bruising, abrasion, etc.

5. Facial Expressions

GM Grimace
PT Pout/Frown
SM Smile
LH Laugh
NE No Expression

Gaze

LC Looks at Child
LT Looks at Caregiver
OO Other Object Look
LB Looks Back and Forth
LA Looks Away
LR Looks in Response
NL No Looking Behaviors

5. Facial Expressions

GM Grimace. A general term to cover various wrinkling contortions of the facial musculature. (Ray, 1974).

PT Pout. Frown. Lower lip or both lips pushed forward; the lower lip curling down, mouth slightly open or closed and mouth corners pulled down. (Ray, 1974).

SM Smile. A blanket term used to cover a wide range including (1) slight raising of the mouth corners, with lips closed; (2) wide-open mouth, with mouth corners retracted horizontally and both rows of teeth visible. (McGrew, 1972).

LH Laugh. The sound is variable but is produced by a series of short repeated expirations and long inspirations of breath, accompanied by some characteristic noise: ha-ha, etc. The mouth is usually wide open and the head thrown back. (Ray, 1974).

LC Looks at Child. The individual's eyes are directed at or fixated on a child. The entire head may be oriented so that the face is directed to the child. (Ray, 1974).

LT Looks at Caregiver. The child's eyes are directed at or fixated on the caregiver. The entire head may be reoriented so that the face is directed toward the caregiver. (Ray, 1974).

OO Other Object Look. The child's eyes are directed at or fixated on an object, but one which the child is neither playing with nor holding. (Dunst, 1980).

LB Looks Back and Forth. The child alternates his glance back and forth between an object and another, usually as an attempt to mark for the other the child's play activity, or call her attention to an object. (Dunst, 1980).

LA Looks Away. A change in the direction of the glance. A blanket term covering a situation where the child's visual gaze is neither directed toward another, or an object which is being played with or which is directly within the child's visual field. (Dunst, 1980).

LR Looks in Response. The child looks at another in response to (i.e., immediately following) something she says or does. Generally the LR response is elicited to her or an object, or "generally the LR response is elicited by another calling the child's attention to her or to an object, or talking about what she or the child is doing." (Dunst, 1980).

6. Non-Verbal Communication

RA Requests Attention
RP Requests Participation
CP Communicative Pointing
SH Shows Object
HD Hands Object
GO Gives Object
PL Pulls Other
TK Takes Object
TG Tugs at Object
RQ Requests Object
GR Grabs Object
NO Shakes Head No
SY Shakes Head Yes
PC Pushes Child Away
PR Protest
SO Showing Off
IMO Imitate With Object
IMG Imitate with Gesture
TT Touches Teacher
TC Touches Child

6. Non-Verbal Communication

RA Requests Attention. Child uses a gesture as an attempt to get another to look at what the child is doing or looking at.

RP Requests Participation. Child uses a "come here" gesture as an attempt to get another person to come to the location where the child is situated.

CP Communicative Pointing. The child extends its arm and usually also extends one or more of the fingers in a specific direction. This action may be accomplished by alternating glances at the object being pointed to and another person, who is usually also addressed: "Look at that!" "What's that?".

SH Shows Object. An object is held out to another to call her attention to it but with no intention of giving it to her.

HD Hands Object. The child hands and gives an object to another in response to her holding her hand out for the child to place it in.

GO Gives Object. An object, held in the hand or hands, is held out for another person to grasp and then is released, or the object may be placed in another person's lap. (Ray,1974).

PL Pulls Other. Child takes the other by the hand and pulls him toward an object the child desires or to have her perform a desired action.

TK Takes Object. Child takes an object from the other's hand in response to her holding it out to him.

TG Tugs at Object. Holding or pulling an object which another is also holding and does not immediately release. (Ray, 1974).

RQ Requests Object. Child holds his hand out to another in an apparent attempt to have her give an object she is holding to him.

GR Grabs Object. Child attempts to or takes an object from another's hand when he has not held it out toward the child.

NO Shakes Head No. Child shakes his head back-and-forth across the midline as a gesture to indicate negation. (C. Dunst).

SY Shakes Head Yes. Child nods his head up and down as a gesture to indicate affirmation. (C. Dunst).

PC Pushes Child. Child responds by pushing another child's hand away or attempting to push his body away as a sign of protest. (C. Dunst).

PR Protest. Child cries or shows overt signs of protest, usually in response to another taking a toy away, moving the child away from a toy or when another insists on the child performing a certain behavior or when not permitting the child to engage in a particular action.

SO Showing Off. Child repeats his own behavior or imitates another's behavior which provokes laughter or comment from another person.

IMO Imitate With Object. Matching another's behavior. (Tremblay, in press).

IMG Imitate With Gesture. Matching another's gestures within three seconds of a peer's novel motor behavior. (Tremblay, in press).

TT Touches Teacher. Child reaches out and touches another hand (or other body part) but without an apparent attempt to direct her attention toward some goal. May include contact comfort. (C. Dunst).

TC Touches Child. Individual reaches out and touches the other's hand (or other body part) but without any apparent attempt to direct his attention toward some goal.

7. Verbal Communication

VT Vocalizes to Caregiver
VC Vocalizes to Child
VRT Vocalizes in Response to Caregiver
VRC Vocalizes in Response to Child
OV Other Vocalization
NV No Vocalization
CM Command
QU Question
ST Statement
BR Behavior Requests
IMS Informational Mutual Statements
MU Mutual Utterances
IR Informational Requests
NU Nonmutual Utterances

7. Verbal Communication

VT Vocalizes to Caregiver. The child vocalizes spontaneously to the caregiver during the play episode. It is usually part of a general pattern directed toward the caregiver but is not elicited by her. (C. Dunst).

VC Vocalizes to Child. The child vocalizes spontaneously to another child during the play episode. It is usually part of a general pattern directed toward the child, but is not elicited by the child. (C. Dunst).

VRT Vocalizes in Response. The child vocalizes in response to (i.e., immediately following) something the caregiver says or does. The other individual may be commenting about the child's play showing an object to the child, intentionally attempting to elicit a verbal response, etc. Whether intentional or not, her behavior has the apparent effect of eliciting a vocalization from the target child.

VRC Vocalizes Response to Child. The child vocalizes in response to (i.e., immediately following) something a child says or does. The child may be commenting about the child's play, showing an object to the child, intentionally attempting to elicit a verbal response, etc. Whether intentional or not, the behavior has the apparent effect of eliciting a vocalization from the target child.

OV Other Vocalization. Includes any vocalization, other than crying, to protest behaviors, which occur during the play episode, and which is not directed toward another or elicited by him. Generally, the OV response is emitted as part of the child's play with a toy.

CM Command. The target child orders or directs other children in order to receive an object, information or to begin or terminate some activity (e.g., "Stop that!"; "Come over here.") (Tremblay, et al, in press, p. 3).

QU Question. The target child asks for object, permission or information from peers (e.g., "Can I have it?"). (Tremblay, et al., in press, p. 3).

ST Statement. The target child's vocalization to a peer is a neutral declaration (e.g., "My car is red.") (Tremblay, et al, in press).

BR Behavior Requests. Behavior requests are utterances, relevant to the toy interaction, that consist of directions, instructions, demands, or clear suggestions to the companion child. To be counted as such, the utterance must contain a request for the other child to respond immediately, either motorically or verbally. Examples include: "Put it over there," "Come here," "Robert" (meaning "Look"), as well as negative directions such as, "Stop it" or "Don't do that." Also included are "I want" statements to the other child that require an immediate response and modified imperatives with a question form such as, "Why don't you close the door?" or "Will you stop it?". Any modified imperative that clearly implies a behavior request is so categorized. (Nelson, 1973; Mahoney and Seely, 1976).

IMS Informational Statements--Mutual. Information statements are used for the purpose of mutual information exchange or for interactions relevant to the toy interaction. They consist of utterances that provide information or description, or comments relevant to the toy interaction. The utterances can be instructional or non-instructional in nature. Utterances are categorized as mutual interactions when children are making eye contact or when communication is clearly indicated through gesture or comment, or when the children are engaged in a sequence of activities together. Utterances directed to the toy, or spoken in the role of the toy, are counted as informational statements when the exchange is mutual. (Nelson, 1973; Mahoney and Seely, 1976).

MU Mutual Utterances. Utterances not relevant to the toy interaction, but mutual. Utterances consisting of behavior requests, informational statements or informational requests that are not relevant to the toy interaction but are mutual.

IR Informational Requests. Informational requests are utterances, relevant to the toy interaction, judged as questions due to the rising intonation or grammatical structure. Modified imperatives with a question form, such as, "Why don't you do it?" are not informational requests. Questions posed in a role-playing situation, directed to and requiring an answer from the companion child who may also be in the role of a toy are counted as informational requests. (Nelson, 1973; Mahoney and Seely, 1976).

NU Nonmutual Utterances. Nonmutual utterances consist of utterances by children playing by themselves, self-speech, and fantasy comments that do not relate to interactions with the companion child. Included here are non-mutual utterances which would otherwise be classified as behavior requests, informational statements, or informational requests.

8. Caregiver Behaviors

Teaches

CD trol Directed
IE itiated-Elicited
SH Shared
EL Elaborative
AS Assisted
RP Responsive Phasing
WA Watching

Physical Actions

WTO Walks to Object
WTC Walks to Child
WFO Walks from Object
WFC Walks from Child

Facial Expressions

GM Grimace
PU Pout/Frown
SM Smile
LH Laugh
LC Looks at Child
LR Looks in Response

Non-Verbal Communication

TC Touches Child
NO Shakes Head No
SY Shakes Head Yes
GO Gives Object
RQ Requests Object
CP Communicative Pointing
TK Takes Object
HD Hands Object

Verbal

PS Praise
SC Scold
CM Command
QU Question
ST Statement
VC Vocalize to Child
LC Looks at Child
VL Vocalizes/Looks
NV No Vocalization
VRC Vocalizes in Response to Child
VRL Vocalizes/Looks in Response to Child

8. Caregiver Behaviors - Teaches

CD Control Directed

The caregiver attempts to get the child to perform a behavior by himself w/out assistance. (C. Dunst).

IE Initiated-Elicited

The caregiver attempts to elicit the child's attention to her or an object by talking, pointing to an object, showing him a toy, activating an object, performing an action. Includes attempting to direct the child's attention away from what he is currently doing or attempting to focus the child's attention on a different aspect of an object the child is currently playing with. For example, the child may be sliding a toy back and forth with the caregiver attempting to get him to wind it up. Includes a change in the direction of an activity. (C. Dunst).

SH Shared

The caregiver and child are engaged in the same activity (e.g., rolling a ball back and forth, imitating each other's actions, etc.) in a reciprocal your turn-my turn sequence. (C. Dunst).

EL Elaborative

The caregiver is doing something with the toy. Caregiver tries to elaborate on what the child is already doing. The child is already sliding a toy and the caregiver shows him how to slide it harder. (C. Dunst).

AS Assisted

The caregiver is assisting the child in response to something the child says or does. Caregiver helps the child do something. The child need not "request" her assistance, but the caregiver nevertheless interprets the child's behavior as if he needs her help. For example, the caregiver may be removing a toy attached to a wall which the child is playing with, holding a toy "steady" so the child can play with it, retrieving an object the child is visually attending to, etc. If, following a successful attempt to elicit the child's attention to a toy or herself, she now assists the child in his play. (C. Dunst).

RP Responsive Phasing

The caregiver is verbally commenting about the child's play but with no explicit attempt to elicit her attention or intervene in any way. Rather, she "interjects" a comment into the child's ongoing play behavior. The responsive behavior is sometimes

8. Caregiver Behaviors - Teaches (continued)

RP Responsive Phasing (continued)

accompanied with a non-verbal behavior (e.g., moving closer to the child). Verbally commenting but not trying to elaborate or do anything. (C. Dunst).

WA Watching

The caregiver is simply sitting and watching the child, neither talking to him nor interacting. (C. Dunst).

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